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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,457	11/28/2001	Dean Thetford	P 282717	3055
909 7590 11/07/2003				
PILLSBURY WINTHROP, LLP				
P.O. BOX 10500				
MCLEAN, VA 22102				
			EXAMINER	
			SHOSHO, CALLIE E	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/890,457

Applicant(s)

THETFORD ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 October 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☒ Applicant's reply has overcome the following rejection(s): 35 USC 103 rejections of record.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: 25-27.Claim(s) rejected: 15-24 and 28-32.

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

Callie E. Shosho  
Primary Examiner  
Art Unit: 1714

**Attachment to Advisory Action**

1. Applicants' amendment filed 10/16/03 has been fully considered.

Applicants' arguments overcome the 35 USC 103 rejections of record as set forth in paragraphs 7-9 of the office action mailed 8/13/03. In light of this, claims 25-27 are now objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

However, applicants' amendment and arguments do not overcome the 35 USC 102 rejections of record as set forth in paragraph 5 of the office action mailed 8/13/03, namely, the rejection of claims 15-24, 28-30, and 32 by Schofield et al. (U.S. 5,837,046) taken in view of the evidence in GB 2001083.

Further, claim, 31 is now also rejected under 35 USC 102 by Schofield et al. taken in view of the evidence in GB 2001083 in light of applicants amendment to this claim.

Thus, upon entry of this after-final amendment, claims 15-24 and 28-32 will be rejected under 35 USC 102 while claims 25-27 will be objected to as being dependent upon a rejected base claim.

With respect to the 35 USC 102 rejection of record, it is noted that Schofield et al. disclose method for drop-on-demand printing an image on a substrate comprising applying non-aqueous ink to substrate by drop-on-demand printing wherein the ink, which has viscosity of 6-30 MPa s, comprises pigment, nonaqueous medium which comprises aliphatic hydrocarbon solvent and oleyl alcohol and possesses solubility parameter of 0.1-5 MPa<sup>1/2</sup>, and dispersant. The

dispersant is formed by reacting polyalkyleneimine with polyester having free carboxylic groups. In describing the dispersant, Schofield et al. refers to GB 2001083 et al. for specific examples of the dispersant. Thus, GB 2001083 discloses dispersant produced by reacting polyalkyleneimine that has molecular weight of 10,000-100,000 with polyester derived from hydroxycarboxylic acid such as hydroxystearic acid that has average molecular weight of 1600. The ratio of polyester to polyethyleneimine is 1:1 to 10:1.

Applicants argue that in GB 2001083 the polyester is derived from either saturated hydroxy carboxylic acid or unsaturated hydroxy carboxylic acid and that the dispersant is in the form of free base, salt of an acid, or quaternary ammonium salt while in the present claims, the dispersants are only derived from saturated hydroxy carboxylic acid and the dispersant is only in the form of a free base with no provision for salts with an acid or quaternary ammonium. Thus, applicants argue that the dispersant presently claimed is a narrow selection out of Schofield et al.

However, applicants' attention is drawn to MPEP 2131.02 (A) which states that "...when the species is clearly named, the species claim is anticipated no matter how many other species are additionally named", *Ex Parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990). Thus, even though GB 2001083 discloses additional dispersants in addition to the dispersant presently claimed, the fact remains that GB 2001083 does disclose dispersant derived from saturated hydroxy carboxylic acid that is in the form of free base and thus, meets the limitations of the present claims.

Applicants also argue that while GB 2001083 discloses weight ratio of polyester to polyethyleneimine of from 1 to 10, GB 2001083 clearly prefers weight ratio of from 2 to 5 which

outside the scope of the present claims. Applicants also note that the examples of GB 2001083 disclose weight ratio of polyester to polyethyleneimine outside the scope of the present claims.

However, while it is agreed that the preferred weight ratio of polyester to polyalkylene imine disclosed by GB 2001083 is outside the scope of the present claims, “nonpreferred disclosures can be used. A nonpreferred portion of a reference disclosure is just as significant as the preferred portion in assessing the patentability of claims”, *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960). Further, while none of the examples of GB 2001083 teach weight ratio of polyester to polyalkylene imine as presently claimed, it is noted that, “applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others”, *In re Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). A fair reading of the reference as a whole discloses that GB 2001083 disclose weight ratio of polyester to polyalkylene imine of “desirably greater than 1 and preferably in the range of 1 to 10” which clearly overlaps the ranges of 7:1 to 20:1 (claim 15 and claim 31), 9:1 to 13:1 (claim 17), 7:1 to 13:1 (claim 29), and 10:1 to 13:1 (claim 30) presently claimed.

Applicants also point to comparative data found in the specification wherein ink comprising dispersant within the scope of the present claims, i.e. possessing weight ratio of polyester to polyalkylene imine of 7:1, 10:1, and 13:1, is compared with ink comprising dispersant outside the scope of the present claims, i.e. possessing weight ratio of polyester to polyalkylene imine of 3.5:1. It is shown that the inks of the present invention are superior in terms of Receding Meniscus Velocity (RMV).

However, Schofield et al. is used as a reference against the present claims under 35 USC 102. As cited in MPEP 706.02(b), it is noted that a rejection based on 35 USC 102(a), can only be overcome by (a) persuasively arguing that the claims are patentably distinguishable from the prior art, (b) amending the claims to patentably distinguish over the prior art, (c) filing an affidavit under 37 CFR 1.131, (d) filing an affidavit under 37 CFR 1.132 showing that the reference invention is not by "another" or (e) perfecting priority under 35 USC 119(e) or 120. As can be seen, comparative data is not sufficient to overcome an anticipatory rejection under 102(a).

With respect to claim 31, it is noted that in paragraph 12 of the office action mailed 8/13/03, claim 31 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims given that the "closest" prior art, Schofield et al. and GB 2001083, each teach dispersant that is formed by reacting polyalkyleneimine with polyester having free carboxylic groups. There is no disclosure in either reference of dispersant that is formed by reacting polyamine with polyester as required in present claim 31.

In the amendment filed 10/16/03, applicants state on page 6 that claim 31 has been rewritten in independent form. However, claim 31, prior to this after-final amendment, recited "wherein Z is the residue of a polyamine". In amending claim 31, applicants also inadvertently included in the claim that Z is the residue "of polyimine" making claim 31 identical to claim 15, and thus now also rejected under 35 USC 102 as is claim 15.

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Of course, if applicants were to amend claim 31 to delete the phrase "or polyimine" such that the claim recites that the Z is the residue of polyamine only, claim 31 would be allowable over the prior art of record for the reasons set forth above.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
11/5/03